

# VRA1.0 PSW **Powered** Subwoofer

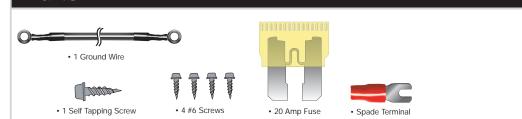
#### Dear Customer.

CONGRATULATIONS. The VRA1.0PSW Powered Subwoofer, when used as described, will give you years of dependable service in your car, truck, RV or mini-van. We have taken numerous measures in quality control to ensure that your product arrives in top condition, and will perform to your satisfaction. In the rare event that your VRA1.0PSW Powered Subwoofer contains a damaged or missing item, does not perform as specified, requires warranty service or you have an installation problem. DO NOT RETURN THIS PRODUCT TO THE STORE. Please cal our TOLL FREE number US (800-445-1797) and ask to speak with a member of our technical service team, or submit your questions by E-Mail to customerservice@vr-3.com and a member of our technical service team will respond by E-Mail to your questions. Our in-house technical service team will expedite delivery of your part, advise you on installation, or help troubleshoot a problem with you. If your product needs warranty service, our technical service team representative will help you obtain the fastest remedy possible under the warranty

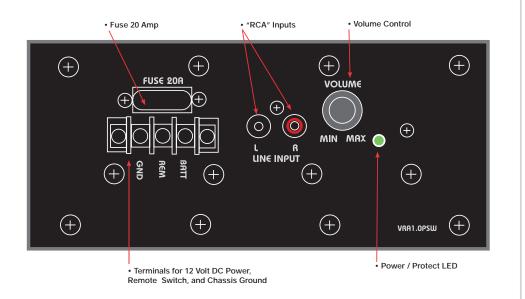
## **Specifications**

- 400 Watts Total Power
- 100 Watts @ 4 Ohms < or = 1% THD+N. S/N > or = 75 dbA ref. 1 Watt Output @ 14.4 VDC.
- Measured at 14.4 VDC Input Voltage
- Frequency Response: 25~150 Hz
- Dimensions: 18.63" L X 9.25" W X 7.25"H
- Ported ABS Enclosure
- Fuse: 20 Amp Automotive Blade Type

# **Parts**



# **Features & Functions**



## 1 Pre-installation

### Tools Needed For Installation:



#### We recommend an Amplifier Installation Kit containing the following parts:

- Power Wire 8 Gauge w/ Terminal Lug · Input Wires - Shielded RCA cables
- After-Market Battery Terminal • Remote Wire - 20 Gauge

#### Location

Place the powered subwoofer in a location that allows air to circulate around it. Amplifier location and installation will vary from vehicle to vehicle depending on physical layout of the vehicle. Carefully consider as many installation locations and configurations as is practically possible DO NOT COVER the powered subwoofer with carpet or enclose it behind interior panels. DO NOT mount inverted or upside down. The amplifier may be mounted vertically.

Before permanently installing your VRA1.0PSW Powered Subwoofer, place the VRA1.0PSW Powered Subwoofer in the approximate place it will occupy in your car. Run all power and speaker wires inside the vehicle toward the powered subwoofer prior to mounting. This will allow you to estimate how much wire you'll need and where to route the wires inside of your vehicle.

Connect the fused 12 Volt DC power wire, chassis ground cable, and remote wires. (SEE SECTION 3, ELECTRICAL CONNECTIONS)

Turn on the car strereo, if the Power Protection light is green, turn off the stereo and proceed to the next section. If the Power Protection light is red, review all of the connections and wires. You may have a loose connection, a bad chassis ground, or an inadequate size power wire. If the problem persists after reviewing all of the connections and wires, call our toll-free help line for assistance.



Do not mount inverted or upside down. Do not cover with carpeting or enclose it behind interior panels

# 2. Mounting the Powered Subwoofer



Water Damage: Do not install this Powered Subwoofer in a location that will expose it to water or moisture. Dust or Dirt: Do not install this Powered Subwoofer in a location that will expose it to dusty or dirty conditions DO NOT BLOCK THE PORT OPENING FOR ANY REASON.

Modifications: Do not open the Powered Subwoofer for any reason, or modify it in any way. If modified in any way a fire hazard or malfunction may occur. Modification will void the warranty.

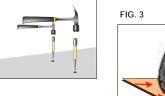
FIG. 1





Attach the supplied brackets to the base of the Powered Subwoofer using the 4 Phillips Pan Head Screws. (Figure 1)

### FIG. 2



# **Steel Mount**

With a hammer & nail set/center punch, make dimple marks on the mounting surface for each monting screw.

(Figure 2)

#### **Carpet Mount**

Cut a piece of plywood 22" x 11" and slide it under the carpet where the powered subwoofer will be mounted and proceed to step #4 (Figure 3)

FIG. 4 3.

Drill 4 pilot Holes with an electric drill & 1/16" bit. Make sure that nothing is behind the mounting surface that can be damaged when drilling the holes (Figure 4)

FIG. 5



Secure the Powered Subwoofer using the 4 self tapping screws included



# **3 Electrical Connections**



Read the following wiring instructions very carefully. If you have any trouble understanding any of these instructions, have the amplifier professionally installed by an experienced technician. Incorrect wiring will prevent the amplifier from operating, or will damage the amplifier.

#### **Recommended Method For Splicing Wires**





#### 1. Power Terminal

- 1. DISCONNECT THE NEGATIVE(-) BATTERY TERMINAL FROM THE NEGATIVE BATTERY POST.
- 2. Strip ½" of insulation from the end of the 8 gauge power wire. Connect the 8 gauge power wire to the after-market positive battery terminal according to the manufacturer's installation instructions.



- 3. Install a 25 amp fuse or 25 amp circuit breaker in the 8 gauge power wire as close to the battery as practical. 4. Route the 8 gauge power wire from the 25 amp fuse or circuit breaker to the rear of the powered subwoofer
- 5. Strip 1/2" width of insulation from the end of the 8 gauge power wire.
- 6. Attach a spade lug on the end of the 8 Gauge wire.
- 7 Loosen screw to open POWER connector plates on rear of amplifier
- 8. Insert the spade lug between the connector plates. Turn screw until power cable is tight.

### 2. Remote Terminal

The REMOTE wire connection automatically turns on your amplifier when your stereo is turned on.

On most stereos, this wire is marked as the REMOTE, ACCESSORY, or POWER ANTENNA.

1. Locate the REMOTE, ACCESSORY, or POWER ANTENNA on the stereo. (Refer to your stereo owner's manual.)

- 2. Splice the REMOTE, ACCESSORY or POWER ANTENNA wire from rear of the stereo to a length of wire that will
- reach the rear of the amplifier
- 3. Loosen screw and open REMOTE connector plates on rear of amplifier.
- 4. Insert wire end between the REMOTE connector plates.
- 5. Tighten screw closing REMOTE connector plates on wire

- 1. The ground connection cable should be attached to clean, unpainted chassis metal for a good electrical connection.
- 2. Find good, non-rusted chassis metal, as close to the amplifier as possible.



- 3. Drill a pilot hole with a 1/16" drill bit.
- 4. Use sandpaper to expose an area of bare metal around the pilot hole about the size of a dime.
- 5. Tightly fasten the provided ground cable with the self tapping sheet metal screw to the chassis metal.
- A loose ground will cause distortion and popping noises in the speakers.

#### **Recommended Method For Attaching Wires to Terminals**

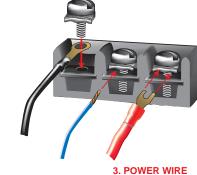
#### 1. GROUND WIRE

To connect the supplied ground wire, remove the screw and contact from the ground terminal on the rear of the amplifier. Put the screw through the contact plate, then through the ground wire, and finally tighten the screw.

#### 2. REMOTE WIRE

To connect the remote wire, place the twisted end under the contact plate and tighten screw.

1. GROUND WIRE



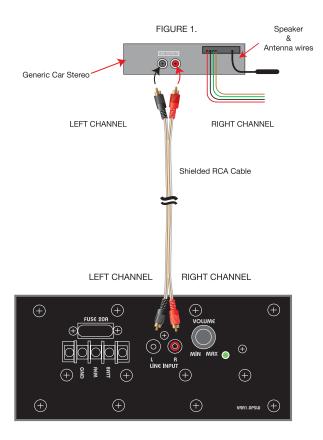
# 3. POWER WIRE

When connecting the power wire, place the spade terminal under the contact plate and the forks around the screw. Then tighten the screw.

2. REMOTE WIRE

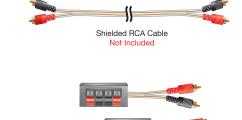
# **4 RCA Line Inputs**

The line inputs on the front of the amplifier receive low level, high impedance signals from the low level RCA outputs of the car stereo. The amplifier receives the signals and converts them to high level, low impedance signals to be used to drive the speakers. All of the amplifiers line inputs need to be connected to the car stereo, in order to use all of the speaker outputs



#### Adaptors & Cables

If your stereo does not have RCA type output jacks, a high level to low level adaptor will need to be purchased. The high level to low level adaptor takes the signals from the car stereo's speaker wires and converts them to low level, high impedance signals to be used by the amplifier. Install the converter according to the manufacturers' instructions



High Level to Low Level Input Adaptor

# 5. Volume Settings

- 1.Set the volume control on the VRA 1.0PSW to Minimum.
- 2.Turn on the car stereo. The VRA 1.0PSW will turn ON and the green LED will be on.
- 3.Set the head unit volume to a normal listening level on your speakers.
- 4.Adjust the VRA1.0PSW volume control until the subwoofer volume matches the speakers.
- 5.NOTE: Never turn the volume control to Maximum.

This will result in damage and void the warranty.

# **Frequently Asked Questions**

### What is the RMS power of the built-in digital amplifier?

The digital amplifier is rated at 100 Watts RMS power.

### What is the frequency response of the VRA1.0PSW?

Frequency response is 25 Hz  $\sim$  150 Hz  $\pm$  3 db. This bandwidth was selected for optimum bass performance.

### What is a ported enclosure?

There is a round tube on the side of the ABS enclosure that tunes the volume of air inside the enclosure to match the subwoofer's response. It is normal to feel air moving in and out of the opening. DO NOT block the opening for any reason.

### Why do I sometimes hear a clicking sound?

A clicking sound indicates that the digital amplifier is being driven into distortion. Turn down the volume control until it stops clicking.

### Why does the LED switch between green and red?

Suspect the power and ground connections or insufficient wire size to carry the current demand. Remember that the chassis ground connection is the return path for negative voltage.

### What does it mean if the LED stays red?

A constant red LED indicates that the digital amplifier inside VRA1.0PSW has malfunctioned. Call Technical Service (1-800-445-1797) for assistance.



GIVE US A CALL, WE'LL HELP YOU INSTALL.

PLEASE DO NOT RETURN PRODUCT TO STORE. Visit us on the WEB

# www.vr-3.com

For Information and Technical Assistance, Call Toll-Free in U.S.A. and Canada.

1-800-445-1797

### Notes

# **Limited Warranty**

VIRTUAL REALITY VIDEO LABS® products are designed and manufactured to provide a high level of trouble-free performance. VIRTUAL REALITY VIDEO LABS warrants, to the original purchaser, that its products are free from defects in material and workmanship for 30 days from the date of original purchase. As part of our commitment to product excellence, VIRTUAL REALITY VIDEO LABS and/or its affiliates routinely improve the deiction methods of its existing products. Because it is impractical to publicize all changes in every product, we reserve the right to make such changes without notice.

#### CONDITIONS OF WARRANTY

If during the 30 day warranty period your new product is found to be defective, VIRTUAL REALITY VIDEO LABS will repair such defect, or replace

the product, without charge for parts or labor subject to the following conditions:

1. All repairs must be performed by VIRTUAL REALITY VIDEO LABS and/or its affiliates in Eatontown, New Jersey.

The equipment must not have been altered or been damaged through negligence, accident, or improper operation.
 The replacement of parts are exempted from this warranty when replacement is necessary due to normal wear and teat
 All warranty claims must be accompanied by a copy of the sales receipt or bill of sale.

5. Repair or replacement parts supplied by VIRTUAL REALITY VIDEO LABS under this warranty are protected only for the unexpired portion of the

6. In the case of car stereos, this warranty does not extend to the elimination of car static or motor noise; correction of antenna problems; costs

incurred for the removal or reinstallation of the product; damage to tapes, speakers, accessories or car electrical syste 7. VIRTUAL REALITY VIDEO LABS will not be responsible for any charge incurred for installation.

#### OWNER'S RESPONSIBILITIES:

VIRTUAL REALITY VIDEO LABS will make every effort to provide warranty service within a reasonable period of time.

SHOULD YOU HAVE ANY QUESTIONS ABOUT SERVICE RECEIVED. OR IF YOU WOULD LIKE ASSISTANCE IN OBTAINING SERVICE, PLEASE CALL TOLL FREE 1-800-445-1797, 8:30am - 4:30pm EST.

In order to provide you with the proper warranty service, we request that you adhere to the following procedure:

In order to provide you with the proper warranty service, we request that you adore to the following procedure:

1. Include a copy of your sales receipt or bill of sale with your unit when it is returned for warranty service.

2. If it is necessary to return your product for service, please return it securely packed, preferably in the original shipping carton, and freight and insurance prepaid to the following address: VIRTUAL REALITY VIDEO LABS, Service Department, 41 James Way, Eatontown, New Jersey 07724.

3. Please include a detailed explanation of the problem you are having.

4. If your product is found by VIRTUAL REALITY VIDEO LABS to have a defect in material or workmanship, within the warranty period, it will be

repaired or replaced at no charge and returned to you prepaid. Where permitted by law VIRTUAL REALITY VIDEO LABS liability shall be limited to that set forth in this warranty. This warranty shall be the exclusive remedy of the purchaser.

VIRTUAL REALITY VIDEO LABS makes no other warranty of any kind, expressed or implied; and all implied warranties, are hereby disclaimed by VIRTUAL REALITY VIDEO LABS and/or its affiliates, the manufacturer, distributor and seller shall not be liable for any injury, loss or damage, incidental or consequential, arising out of the use or intended use of the product.



